

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: A. ITAI et al.

Group Art Unit: 2764

Serial No.: 09/810,670

Examiner: Unknown

Filed: March 19, 2001 as PCT/JP96/03325

For: DESIGN METHOD OF PHYSIOLOGICALLY ACTIVE COMPOUND

**INFORMATION DISCLOSURE STATEMENT**

Commissioner of Patents and Trademarks  
Washington, DC 20231

Sir:

In accordance with Applicants' duty of disclosure under 37 C.F.R. 1.56, Applicants hereby submit the following Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98, and in conformance with MPEP 609 and 2001.06(b).

Applicants hereby make of record the information disclosure statements filed April 12, 1999, in parent U.S. Application No.09/068,459. The Examiner is respectfully requested to consider the documents cited in the above-mentioned Information Disclosure Statement and to make the documents therein.

For the convenience of the Examiner, documents cited in the parent application information disclosure statement are listed on the attached PTO-1449 form. The Examiner is requested to initial the Form PTO-1449, and to return the initialled copy with the next communication from the U.S. Patent and Trademark Office.

Copies of the International Search Report (in English) and the International Preliminary Examination Report (in English) were filed when entering the national stage on May 12, 1998, so that the Examiner can see the relevance attributed to the documents during the international examination.

P20797.A01

Additionally, the Examiner's attention is directed to the following commonly assigned co-pending U.S. patent applications, copies of which are enclosed:

U.S. Application Serial No. 08/817,646, filed April 29, 1997, in the name of ITAI et al., entitled, "Method of Retrieving Novel Ligand Compounds from Three-Dimensional Structure Database."

U.S. Application Serial No. 09/446,897 filed April 3, 2000 in the names of ITAI et al., entitled, "Method for Inferring Protein Functions with the Use of Ligand Database."

U.S. Application Serial No. 09/091,837, filed July 13, 1998 in the names of ITAI et al., entitled, "Preparation Method of Physically Active Compound."

U.S. Application Serial No. 09/508,527, filed July 17, 2000 in the names of ITAI et al., entitled, "Method of Predicting Three-Dimensional Structure of Protein."

U.S. Application Serial No. 09/700,708, filed November 24, 2000 in the names of ITAI et al., entitled, "Method for Predicting Functions of Protein."

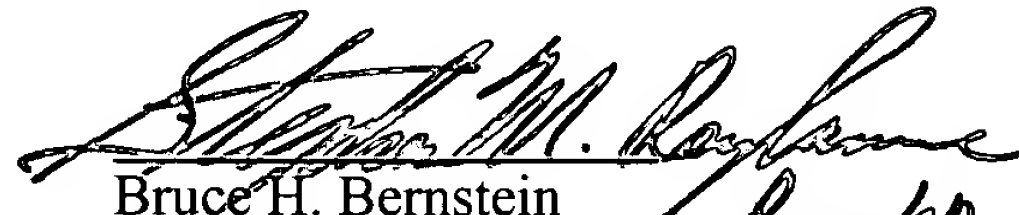
Applicants note that copies of these applications are attached hereto. The Examiner is invited to review the file wrapper of these U.S. patent applications, including the specifications, claims, disclosure statements, and documents cited therein, at the U.S. Patent and Trademark Office.

Applicants note that this disclosure statement is being filed after three months from the filing date, but is being filed prior to receipt of a first action on the merits, whereby a fee should not be necessary for consideration of the disclosure statement. However, if for any reason a fee is required for consideration of this disclosure statement, including any fee under 37 C.F.R. 1.17(p), the Commissioner is authorized to charge any necessary fee to Deposit Account No. 19-0089.

P20797.A01

If the Examiner has any questions, the Examiner is respectfully invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
A. ITAI et al.

  
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November 14, 2001  
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Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No. P20797		Serial No. 09/810,670							
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				Applicant Akiko ITAI et al.									
				Filing Date March 19, 2001		Group 2764							
U.S. PATENT DOCUMENTS													
EXAMINER INITIAL		DOCUMENT NUMBER						DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
		5	6	4	2	2	9	2	06/24/97	ITAI et al.			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)													
		1	Desjarlais et al., <i>Proc. Natl. Acad. Sci.</i> , USA, Vol. 87, pp. 6644-6648, 1990										
		2	Moon et al., <i>Tetrahedron Computer Methodology</i> , Vol. 3, No. 6C, pp. 697-711, 1990.										
		3	Saito et al., <i>Experimental Medicine</i> , Vol. 12, No. 4 (March Issue), pp 68 (444)-70(446), 1994.										
		4	Itai et al., Structural Analysis of Malarial DHFR and Inhibitor Design, Report in Fiscal Year Heisei 6 (March 1995) on "chemistry of Natural Super Molecules" in the intensive field research made by a subsidy of the Ministry of Education, March 1995, pp. 212-215.										
		5	Tomioka et al., <i>Infection Inflammation and Tissue Immunity</i> , Vol. 25, No. 2, pp 56 (128)-59 (131), June 1995.										
		6	Nishibata et al., <i>Tetrahedron</i> , Vol. 47, pp. 8985-8990 (1991).										
		7	Nishibata et al., <i>J. Med. Chem.</i> , Vol. 36, pp. 2921-2928 (1993)										
		8	Boehm, <i>Journal of Computer-Aided Molecular Design</i> , 6 (1992)593-606.										
		9	Pearlman et al., <i>J. Of Comp.Chem.</i> , Vol. 14, No. 10, pp. 1184-1193, 1993.										
		10	Gehlhaar et al., <i>J. of Med. Chem.</i> , 1995, Vol. 38, pp. 466-472.										
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		12	Rotstein and Murcko, <i>J. Med., Chem.</i> , Vol. 36, pp.1700-1710, 1993.										
		13	Gillet et al., <i>J. Comput. Aided Mol. Design</i> , 7 (1993) 127-153.										
		14	Eisen et al., <i>PROTEINS: Struct. Func. Genet.</i> , Vol. 19, pp. 199-221, 1994.										
		15	Inoue et al., "The 19th Symposium for Structure-Activity Relationship", subject number 29S23, 1991, including pp. 316-319 and pp. 372 with English abstract.										
		16	Kanazawa et al. "The 20th Symposium for Structure-Activity Relationship", subject number 27S22, 1992, including pp. 258-261 and pp. 322 with English abstract.										
		17	Takeda et al. "The 21st Symposium for Structure-Activity Relationship", subject number 26S25, 1993, including pp.321-324 including English Abstract on pp. 324.										
EXAMINER									DATE CONSIDERED				
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.													

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FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
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		18	Ullman. <i>J. Assoc. Comput. Mach.</i> , Vol. 23, pp. 31, 1976.				
		19	Sadowski et al. <i>Chem. Rev.</i> , Vol. 93, pp. 2567-2581, 1993.				
		20	Tomoika et al. <i>J. Comput Aided Mol. Design</i> , Vol. 8, pp. 347, 1994.				
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		23	Mizutani et al. <i>J. Mol. Biol.</i> , Vol. 243, pp. 310-326, 1994.				
		24	Bolin. <i>J. Biol. Chem.</i> , Vol. 257, pp. 13650, 1982.				
		25	Mizutani et al., 24th Symposium for Structure Activity Relationship, Subject Number 14S20 (1996).				
		26	Gallop et al., <i>J. Med. Chem.</i> , Vol. 37, pp. 1233-1251 (1994).				
		27	Burgess, et. al., <i>J. Med. Chem.</i> , Vol. 37, 2985-2987 (1994).				
		28	Sadowski et al., <i>J. Chem. Rev.</i> , Vol. 93., pp. 2567-2581 (1993).				
		29	Weiner et al., <i>J. Am. Chem. Soc.</i> , Vol. 106, pp.765-784 (1984).				
		30	Tomioka, <i>J. Of Computer-Aided Molecular Design</i> , Vol. 1, pp. 197-210 (1987).				
		31	Warshel, <i>J. Phys. Chem.</i> , Vol. 83, pp. 1640-1652 (1979).				
		32	Fletcher et al., <i>Computer Journal</i> , Vol. 6, pp 163 (1968).				
		33	Kabsch, <i>Acta. Cryst.</i> , A32, pp. 922 (1976).				
		34	Kabsch, <i>Acta. Cryst.</i> , A34, pp. 827-828 (1978).				
		35	Press et al. "Numerical Recipes in C"; Cambridge University Press, 1989.				
		36	DESJARLAIS et al. <i>J. Med. Chem.</i> 31, pp. 722-729 (1989).				
		37	LAM et al. <i>Science</i> 263, pp. 380-384 (1994).				
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Form PTO-1449

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Patent and Trademark OfficeAtty. Docket No.  
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09810,670INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT  
(Use several sheets if necessary)Applicant  
Akiko ITAI et al.Filing Date  
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## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
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	7 1 3 3 2 3 3	1995	JAPAN			
9 3	/ 2 0 5 2 5	1993	WIPO			
9 7	/ 2 4 3 0 1	1997	WIPO			
9 6	/ 1 3 7 8 5	1996	WIPO			
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38	MILLER et al. <u>Journal of Computer-Aided Molecular Design</u> 8, pp. 153-174 (1994).
39	YAMADA and ITAI <u>Chem. Pharm. Bull.</u> 41(6), pp. 1200-1202 (1993).
40	YAMADA and ITAI <u>Chem. Pharm. Bull.</u> 41(6), pp. 1203-1205 (1993).
41	An English Language abstract of JP 6-309385.
42	An English Language abstract of JP 7-133233.

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